### WRITTEN STATEMENT FOR THE RECORD

## HAROLD KRAMER, CHIEF OPERATING OFFICER (ARRL) THE NATIONAL ASSOCIATION FOR AMATEUR RADIO

### **BEFORE THE**

# SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET COMMITTEE ON ENERGY AND COMMERCE UNITED STATES HOUSE OF REPRESENTATIVES

### "PUBLIC SAFETY COMMUNICATIONS FROM 9/11 TO KATRINA: CRITICAL PUBLIC POLICY LESSONS"

## WASHINGTON, DC SEPTEMBER 29, 2005

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Thank you, Mr. Chairman and members of the subcommittee, for the opportunity to testify today on issues related to Public Safety Communications. As Chief Operating Officer of ARRL, the National Association for Amateur Radio, it gives me great pleasure to provide this statement for the record to the Committee on the successful efforts of Amateur Radio operators providing communications for First Responders, Disaster Relief agencies, and countless individuals in connection with the Hurricane Katrina relief effort. As has been proven consistently and repeatedly in the past, long before the 9/11 terrorist attacks, when communications systems fail due to a wide-area or localized disaster, whatever the cause, Amateur Radio works, right away, all the time. This is not a statement of concern about what must be changed or improved. It is, rather, a report on what is going right, and what works in emergency communications, and what can be depended on to work the next time there is a natural disaster, and the times after that.

Immediately at the onset of Hurricane Katrina, an all-volunteer "army" of approximately 1,000 FCC-licensed Amateur Radio operators provided continuous high-frequency (HF), VHF and UHF communications for State, local and Federal emergency workers in and around the affected area in Louisiana, Mississippi, and Alabama. These communications were provided for several agencies such as the American National Red Cross and the Salvation Army, and to facilitate interoperability between and among these agencies; First Responders; FEMA, VOAD (National Volunteers Active in Disasters) and other agencies. Trained volunteer Amateur Radio operators also provided health and welfare communications from within the affected area to the rest of the United States and the world. Amateur Radio was uniquely suited to this task by virtue of the availability of HF communications covering long distances without fixed infrastructure. During the week of September 7, 2005, the Coast Guard, the Red Cross, and the Federal Emergency Management Agency all put out calls for volunteer Amateur Radio operators to provide communications, because phone lines, cell sites and public safety repeaters were inoperative, and those public safety communications facilities which were operational were overwhelmed due to loss of repeater towers and the large number of First Responders in the area. Amateur Radio operators responded en masse: Approximately 200 Amateur Radio Emergency Service (ARES) trained communicators responded to the Gulf Coast within a week after the call. The Red Cross, a week after they issued the call, notified ARRL that they had enough radio operators and Amateur Radio communications facilities. The number of Amateur Radio operators providing communications in the three States, either deployed or awaiting relief duty on-site or at a reserve facility in Montgomery, Alabama, swelled from 800 to 1,000 in a week. Many more thousands of radio amateurs outside the affected area regularly monitored radio traffic and relayed thousands of messages concerning the welfare and location of victims.

The principal reason why Amateur Radio works when other communications systems fail

during natural disasters is that Amateur Radio is not infrastructure-dependent, and is decentralized.

Amateurs are trained in emergency communications. They are disciplined operators, and their stations

are, in general, portable and reliable. High-frequency Amateur Radio communications, used

substantially in this emergency communications effort, require no fixed repeaters, cable or wirelines.

Portable repeaters for VHF and UHF communications can be provided via mobile facilities (many

Amateur Radio groups deployed communications vans in the Gulf Coast for precisely this purpose) in

affected areas instantly. There are now approximately 670,000 licensees of the FCC in the Amateur

Service, which assures the presence of Amateur stations in most areas of the country. Emergency

communications are conducted not only by voice, but also by high-speed data transmissions using state-

of-the-art digital communications software known as WinLink. As Motorola's Director of

Communications and Public Affairs stated earlier this month: "Amateur Radio communications benefit

us all by having a distributed architecture and frequency agility that enables you to set up faster in the

early phases of disaster recovery and can provide flexible and diverse communications...Motorola

believes that the Amateur Radio spectrum provides valuable space for these important

communications."

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In Mississippi, FEMA dispatched Amateur Radio operators to hospitals and evacuation shelters

to send emergency calls 24 hours per day. At airports in Texas and Alabama, radio amateurs tracked

evacuees and notified the Baton Rouge operations center of their whereabouts so their families would

be able to find them. Amateur Radio operators in New Orleans participated directly in locating stranded

persons, because local cellphone calls could not be made by stranded victims due to the inoperative

wireline systems in the area. The Red Cross deployed qualified amateur radio volunteers at its 250

shelter and feeding station locations, principally in Mississippi, Alabama and northern Florida.

The local 911 operators could not handle calls from relatives calling in from outside the affected

area, so they passed those "health and welfare" inquiries to amateur radio operators stationed at the 911

call centers, for relay of information back to New Orleans to facilitate rescue missions for stranded

persons.

Amateur Radio provided a communications link between Coast Guard helicopters and

emergency centers because the ambulance crews couldn't contact the helicopters directly. In Texas,

Amateur Radio operators worked 24 hours per day in the Astrodome in Houston and the Reliant

Center next door, and as well in the Harris County Emergency Operations Center. In San Antonio, at

the Kelly Air Force Base, radio amateurs from Montana provided local and national health and welfare

communications for evacuees. These examples were repeated throughout the Gulf Coast and in the

cities in the southern states receiving large numbers of evacuees.

The Salvation Army operates its own Amateur Radio communications system using Amateur

Radio volunteers, known as SATERN. In the Hurricane Katrina effort, SATERN has joined forces

with the federal SHARES program (SHAred RESources), which is a network of government, military

and Military Affiliate Radio Service (MARS) radio stations. MARS is an organized network of Amateur

Radio stations affiliated with the different branches of the armed forces to provide volunteer

communications. SATERN, in the Katrina relief effort, received over 48,000 requests for emergency

communications assistance, and the affiliation with the SHARES program allows the Salvation Army to

utilize Federal frequencies to communicate with agencies directly. This is but one example of the

innovative and reliable means by which Amateur Radio right now provides organized interoperability

on a scope far beyond that now being planned for local and State public safety systems.

Much discussion has been given in recent years to the issue of Public Safety interoperability.

The Amateur Radio Service provides a good deal of interoperability communications for First

Responders in disaster relief incidents. This critical role for our Service exists because, though there are

interoperability channels right now in most Public Safety frequency allocations, those channels, and all

others, become useless where the communications infrastructure of public safety facilities becomes

inoperative. Interoperability, in short, presumes operability of Public Safety facilities. While some

"hardening" of public safety facilities is called for, there is in our view an increasing role for

decentralized, portable Amateur Radio stations which are not infrastructure-dependent in providing

interoperability communications on-site.

Mr. Chairman, Amateur Radio is largely invisible to both the FCC and to Congress on a daily

basis, because it is virtually self-regulating and self-administered. It is only during emergencies that the

Amateur Radio Service is in the spotlight. At other times, emergency communications and technical

self-training and advancement of telecommunications technology occupy licensees' time. For the first

time ever, in recognition of the work of Amateur Radio Operators in this Hurricane Relief effort, the

Corporation for National And Community Service (CNCS), which provides strategic critical support to

volunteer organizations which in turn provide services to communities, has made a \$177,000 grant

supplement to ARRL to support the Katrina emergency communications efforts in the Gulf Coast.

This enables ARRL to reimburse to a small degree, on a per diem basis, some of the expenses that radio

amateurs incur personally in traveling to the Gulf Coast to volunteer their time and effort. The CNCS

grant is an extension of ARRL's three-year, Homeland Security training grant, which has to date

provided certification in emergency communication training protocols to approximately 5,500 Amateur

Radio volunteers over the past three years.

ARRL wishes to commend the FCC's Enforcement Bureau (specifically the Special Counsel for

Amateur Radio Enforcement), for the efficient and successful effort during the Hurricane Katrina relief

in monitoring the Amateur Radio High Frequency bands to prevent or quickly remedy incidents of

interference.

In closing, Mr. Chairman, the Committee should be aware that this vast volunteer resource

in support of Public Safety is always at the disposal of the Federal government and to State and local

government. The United States absolutely can rely on the Amateur Radio Service. Amateur Radio

provides immediate, high-quality communications that work every time, when all else fails.

I thank you again, Mr. Chairman and members of the subcommittee, for the opportunity to

testify today on the views of the ARRL and its membership. I would welcome any questions.

Respectfully submitted,

Harold Kramer, Chief Operating Officer ARRL, THE NATIONAL ASSOCIATION

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#### SUMMARY

- As has been proven consistently and repeatedly in the past, long before the 9/11 terrorist attacks, when communications systems fail due to a wide-area or localized disaster, whatever the cause, Amateur Radio works, right away, all the time. This is not a statement of concern about what must be changed or improved. It is, rather, a report on what is going right, and what works in emergency communications, and what can be depended on to work the next time there is a natural disaster, and the times after that.
- Immediately at the onset of Hurricane Katrina, an all-volunteer "army" of approximately 1,000 FCC-licensed Amateur Radio operators provided continuous high-frequency (HF), VHF and UHF communications for State, local and Federal emergency workers in and around the affected area in Louisiana, Mississippi, and Alabama. These communications were provided for several agencies such as the American National Red Cross and the Salvation Army, and to facilitate interoperability between and among these agencies; First Responders; FEMA, VOAD (National Volunteers Active in Disasters) and other agencies.
- The principal reason why Amateur Radio works when other communications systems fail during natural disasters is that Amateur Radio is not infrastructure-dependent, and is decentralized. Amateurs are trained in emergency communications. They are disciplined operators, and their stations are, in general, portable and reliable.
- The Committee should be aware that this vast volunteer resource in support of Public Safety is always at the disposal of the Federal government and to State and local government. The United States absolutely can rely on the Amateur Radio Service. Amateur Radio provides immediate, high-quality communications that work every time, when all else fails.